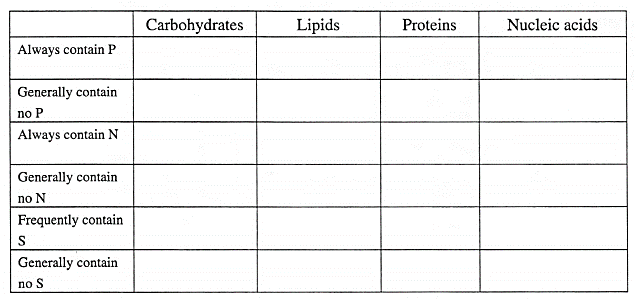
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_

**Macromolecules: The Final REVIEW!**

Mrs. Krouse, 2015-2016

Identify the elements found in each of the macromolecules by filling in the chart given below.



For each of the functional groups listed in the chart below, name the functional group and place a checkmark in the appropriate column to indicate the macromolecules in which that functional group is found.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Functional Group | Name | Carbohydrates | Lipids | Proteins | Nucleic Acids |
| -OH |  |  |  |  |  |
| -C=O |  |  |  |  |  |
| -SH |  |  |  |  |  |
| -COOH |  |  |  |  |  |
| -NH2 |  |  |  |  |  |
| -PO42- |  |  |  |  |  |

Identify each image in the chart given below as either a carbohydrate, lipid, protein, or nucleic acid and either a monomer or polymer.

*Note: #’s 1 and 2 have been completed for you as examples.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Image** | **Carbohydrate, Lipid, Protein, or Nucleic Acid?** | **Explanation** | **Monomer or Polymer?** |
| 1 |  | Lipid | This is a fatty acid chain (all C’s and H’s) bonded to a glycerol molecule | Polymer |
| 2 |  | Protein | This is an amino acid because it has a central carbon atom bonded to four things… a hydrogen atom, a carboxyl group (COOH), an amino group (NH2), and an R group | Monomer |
| 3 | http://ww1.prweb.com/prfiles/2011/12/01/9006172/adenine-nucleotide.jpg |  |  |  |
| 4 | http://www.chemeddl.org/resources/models360/files/107526/d-glucose-beta%20Haworth.png |  |  |  |
| 5 | http://web.visionlearning.com/custom/chemistry/custom/images/starch_yellow2.gif |  |  |  |
| 6 |  |  |  |  |
| 7 |  |  |  |  |
| **#** | **Image** | **Carbohydrate, Lipid, Protein, or Nucleic Acid?** | **Explanation** | **Monomer or Polymer?** |
| 8 |  |  |  |  |
| 9 |  |  |  |  |
| 10 |  |  |  |  |
| 11 |  |  |  |  |